

TECHNICAL ASSISTANCE GRANT - TAG #100F30701
FINAL REPORT
San Jacinto River Waste Pits Superfund Site

Date: March 25, 2016

Grant Project Period: May 6, 2011 – December 30, 2015

I. Introduction

Site: San Jacinto River Waste Pits (SJRWP), Channelview, Harris County, Texas

Grant Recipient: Galveston Bay Foundation (GBF), TAG #100F30701

Recipient Group Representative: Scott Jones, Director of Advocacy

Technical Advisor: Jennifer Ronk, Houston Advanced Research Center, The Woodlands, Texas

Galveston Bay and its tidal San Jacinto River/Houston Ship Channel and adjacent tidal waters, the counties surrounding Galveston Bay (Harris, Chambers, Galveston and Brazoria), and cities contained therein (e.g. Channelview, Highlands, Houston, La Porte, Pasadena, Deer Park, and Galveston) have been affected by the SJRWP since the mid-1960s due to direct threats to human health and the environment from the release of dioxin. The health of the area's recreational and commercial fishery industries has also been affected by the release of dioxin due to the resulting State of Texas-issued seafood consumption advisories for Galveston Bay and its tidal tributaries due to presence of dioxin in fish and crab tissues. Containing and cleaning this site may help to reduce the number of years that these advisories must remain in place.

II. Project Goals and Objectives

The goal of the project was to increase the number of citizens aware of the EPA's action and the decisions that need to be made regarding the cleanup of the SJRWP. By increasing local community awareness and through citizen comments to the EPA the on technical clean up documents received to date and through citizen comments at public meetings, the final remedy and future uses of the site can be more reflective of local needs and concerns. In the long term, involving the local community in how the site is cleaned up and redeveloped will help ensure that land is put back into the most productive use possible, thereby furthering EPA's goal of cleaning up and reusing contaminated land. This, in turn, supports EPA's overarching goal of land preservation and restoration.

The specific objectives were as follows:

1. Procure a qualified technical advisor to assist the GBF in interpreting site-related documents.
2. Technical advisor review and analyses of site-related documents and creation of summary reports and briefings of for GBF.
3. With the assistance of the technical advisor, develop outreach pieces for dissemination to the community, e.g. SJRWP webpage, GBF SJRWP email updates, GBF e-newsletters/updates, print media op-eds, and requests for print media editorials.
4. Collaborate with Texans Together Education Fund /San Jacinto River Coalition (TTEF/SJRC), a 501(c)(3), to disseminate information generated by the TAG advisor. TTEF/SJRC had a history of reaching out to these particular communities about the SJRWP, thus they were a logical communication partner.
5. With the assistance of the technical advisor, and in cooperation with (TTEF/SJRC), hold regular meetings open to the public.
6. Host a community forum on the remedial investigation/draft feasibility study prior to EPA hosting its own public meeting on the final feasibility study.

III. Activities to Achieve Goals and Objectives

GBF, the HARC technical advisor, and TTEF/SJRC performed the following activities to achieve the goals and objectives:

1. In June 2011, GBF conducted an in person and multiple conference call planning meetings with TTEF to discuss collaborative outreach efforts.
2. In June 2011, GBF developed the solicitation for a technical advisor via electronic communication to Galveston Bay Foundation's network of board members and partners, including research and communications with potential technical advisors from the local academic and research institutions.
3. On July 12, 2011, GBF made a site visit to the SJRWP, taking a tour of the waste pits and the local Channelview and Highlands communities with the PRPs.
4. During July 2011, GBF received and reviewed three written proposals. We conducted interviews with Mary Ellen Whitworth, P.E. on July 15, 2011; Jennifer Ronk, P.G. and Kali Frost of Houston Advanced Research Center (HARC) on July 22, 2011, and Dr. Lauren Ross, Ph.D, P.E. on July 26, 2011. GBF conducted a fourth telephone interview on July 29, 2011 but did not receive a written proposal from the two interviewees.
5. On August 12, 2011, GBF completed technical advisor candidate reviews and an offer was made to Ronk/Frost of HARC. HARC accepted the offer on August 12, 2011. The non-selected candidates were notified on August 15, 2011.
6. In September 2011, the technical advisor briefed GBF on site conditions and the general Superfund cleanup process. Throughout the remainder of the grant period, the technical advisor subsequently provided briefings before/during/after completion of reports or before/during/after site events, e.g. flooding, armored cap damage, etc. or site cleanup activities, e.g. armored cap damage repair.
7. Throughout the grant period, the technical advisor reviewed and analyzed all site-related documents that were released during the grant period and provided summary reports (see *V. Technical Advisors Work Products* below).
8. On September 13 and September 20, 2011, GBF participated in EPA SJRWP Public Meeting planning conference call.
9. GBF and HARC participated in the following EPA SJRWP Community Public Meetings/Open Houses: September 22, 2011 (we provided information about the cleanup process, upcoming actions and opportunities for involvement); November 15, 2012 (we were instrumental in helping the public better frame their questions and understand the answers and issues during the Q&A period); January 30, 2014 (we answered many questions posed by members of the public about the cleanup process to date, upcoming actions and opportunities for involvement); April 30, 2015 (we answered many questions posed by members of the public about the cleanup process to date, upcoming actions and opportunities for involvement).
10. In October 2011, GBF launched the San Jacinto Waste Pits Superfund site webpage (<http://galvbay.org/how-we-protect-the-bay/taking-action/sjrw/>). Throughout the grant period, GBF updated the SJRWP webpage as new technical documents were received and reviewed, when site updates were received from EPA, or when EPA announced public meetings.
11. In October 2011, GBF produced an article on the SJRWP for the Fall 2011 GBF Gazette (http://galvbay.org/docs/Gazette_Q3_2011.pdf), that provided information to 2500 Foundation members.
12. In October 2011, GBF began populating a GBF SJRWP email recipient list comprised of interested local community members, general citizens, and stakeholders. The list was built through signup sheets filled out by interested people at public meetings, presentations, and via personal correspondence. The current list is approximately 300 individuals. The reach of this list is likely greatly extended through our recipients forwarding the updates to family, colleagues and neighbors and through our collaboration with TTEF/SJRC.

13. Throughout the grant period, GBF provided email updates to recipients on the emailing list about the site and the cleanup process as new technical documents were reviewed and summarized, new information on site conditions and the cleanup process, schedule changes and notices of public meetings.
14. Throughout the grant period, GBF corresponded in person, via phone and via email with members of the local community about their SJRWP-related concerns, including but not limited to: site characterization, dioxin exposure pathways, EPA cleanup process, past river sand mining operation effects on the pits and armored cap integrity, past river sand mining operation effects on soil dioxin concentrations, soil dioxin concentrations as a result of river flooding, barge tow prop washing effects on cap integrity, potential for barge direct impacts to the cap, and findings of the U.S. Army Corps of Engineers draft third-party review of the draft Feasibility Study and draft cleanup alternatives. GBF referred them to the Galveston Bay Foundation SJRWP website (<http://galvbay.org/how-we-protect-the-bay/taking-action/sjrwp/>) where information on these topics can be found in the technical summaries and Superfund documents created by the responsible parties and the USEPA. GBF provided these community members the contact information for USEPA community involvement coordinator and project manager, as well as government entities on the Community Awareness Committee (e.g. Harris County Pollution Control, TCEQ, etc.) as appropriate.
15. Throughout the grant period, GBF and HARC participated in the following EPA-facilitated Community Awareness Committee (CAC) meetings where we provided information on the status of seafood consumption safety outreach, the Technical Assistance program, as well as clarifying EPA information and providing feedback on the cleanup alternatives: July 20, 2011; August 17, 2011; October 19, 2011; November 16, 2011; January 18, 2012; February 22, 2012; May 16, 2012; July 25, 2012; January 24, 2013; March 20, 2013; June 20, 2013; September 25, 2013; March 12, 2014; August 7, 2014; February 25, 2015; July 16, 2015
16. GBF collaborated with TTEF/SJRC to disseminate information generated by the TAG advisor. TTEF/SJRC disseminated that information and GBF's updates using their own database via newsletters, emails, direct mail, neighborhood canvassing, as well as distributed TAG information at public meetings, at key locations frequented by local citizenry (e.g. local grocery stores, churches, community centers), and via phone to the local communities of Channelview, Highlands, Baytown, and Old Baytown.
17. Throughout the grant period, in cooperation with TTEF/SJRC, regular meetings open to the public were held at TTEF/SJRC meeting spaces in Highlands, Channelview, or Baytown. GBF and HARC provided information content for most of these meetings and was on hand to provide information directly to their members at for the following meetings: September 29, 2011; October 19, 2011; January 12, 2012; June 14, 2012; July 17, 2013; January 15, 2014; November 18, 2014; June 23, 2015; September 1, 2015; October 6, 2015.
18. On April 4, 2012, HARC and GBF participated in the Houston Ship Channel/San Jacinto River Dioxin/PCB Total Maximum Daily Load meeting.
19. In October 2012, GBF solidified our relationships with local print media who regularly cover news about the SJRWP, namely reporters and editors from the *Baytown Sun* and the *Highlands Star-Crosby Courier*.
20. On January 24, 2013, GBF and HARC held the GBF/HARC SJRWP TAG Public Meeting at the J.D. Walker Community Center in Baytown. Approximately 100 people were in attendance. Given this turnout, the fact that new faces were in the crowd, and based on feedback, the meeting was successful in helping educate the public and stakeholders about the site cleanup and opportunities for public involvement. Subsequently, GBF and HARC updated the GBF SJRWP webpage to include the meeting presentations, FAQs, and summary.
21. As the TAG recipient, GBF and HARC were invited by Gary Miller, EPA Project Manager, to submit comments on the draft Feasibility Study and the responsible parties' white paper on their

recommendation on the cleanup remedy for the EPA National Remedy Review Board (NRRB). We did so on June 20, 2014.

22. On July 22, 2014, GBF and HARC held a meeting in Houston, Texas with Dr. Lisa Gossett of the University of Houston-Clear Lake and Jackie Young of TTEF/SJRC to discuss our comments to the NRRB on the draft interim final Feasibility Study and the responsible parties' draft proposed plan for cleanup, as well as discuss ways to collaborate to increase public involvement.
23. On August 7, 2014, GBF presented the latest information on the SJRWP to the Houston-Galveston Area Council Natural Resources Advisory Committee in Houston, Texas. Approximately 45 committee members and members of the public were present.
24. On March 10, 2015, GBF and HARC attended the TTEF/SJRC press conference, the subject of which was a study they had completed on contract by Dr. Kathleen Garland of the University of Houston – Clear Lake on waste sites similar to the SJRWP and their selected remedies.
25. On April 1, 2015, GBF presented on the SJRWP cleanup process to Lee College Environmental Science students and faculty in Baytown, Texas.
26. On May 15, 2015, GBF presented on the SJRWP cleanup process to the Crystal Beach Fishing Club in Crystal Beach, Texas.
27. On August 20, 2015, GBF participated in the Texas Association of Environmental Professionals luncheon in Houston that featured a presentation by Dr. Kathleen Garland of the University of Houston – Clear Lake on SJRWP cleanup alternatives. GBF provided insight and answered questions from the audience on the status of the clean up and the potentially responsible parties' draft feasibility study and their proposed cleanup alternatives.
28. On September 10, 2015 GBF and HARC submitted a joint comment letter on the Corps of Engineers' draft third-party review of the responsible parties' draft interim Feasibility Study for submission to the EPA project manager.
29. In September 2015, GBF began gathering information/documentation on subsistence fishing and crabbing in the waste pits area of concern for the EPA project manager; this information may be useful in making sure that the risks from consumption of contaminated fish and crab in addressed in the EPA cleanup assessment. On September 29, 2015, GBF submitted documentation to EPA in the form of photos, maps that GBF produced for a seafood consumption advisory education grant and a prior fishing survey that the potentially responsible parties had produced as a part of the cleanup process, to the EPA project manager, followed up by the submittal of a formal GBF statement on the existence of subsistence fishing on October 15, 2015.

IV. Difficulties Encountered

The following difficulties were encountered, and their resolution is described below:

1. Conflict between TTEF/SJRC desires to produce new/independent cleanup documents with the GBF's TAG requirement to expend grant funds only on the review of EPA Superfund cleanup process technical documents. GBF was able to resolve this issue by simply collaborating with TTEF/SJRC to disseminate TAG-related information and documents, rather than trying to attempt to subcontract grant tasks with them as was originally proposed in our grant application. No TAG grant funds were expended on TTEF/SJRC's behalf.
2. Delay of release of the U.S. Army Corps of Engineers Evaluation of the San Jacinto River Waste Pits Feasibility Study (FS) and the Proposed Plan for Clean Up for review by the technical advisor. GBF attempted to resolve this issue by seeking funded grant extensions from the EPA, but the funding request was denied. Instead, after the initial grant period ended in December 2013, GBF and HARC continued to perform grant activities at our own expense using no cost extensions in 2014 and 2015, hoping that the FS and proposed plan for cleanup would be released. That did not happen. We chose not to seek another no cost extension for 2016, but given our commitment to see all TAG goals fulfilled, we will continue to perform grant

activities, i.e. GBF and HARC will complete review of the FS and the Proposed Plan for Clean Up and continue to provide outreach to the community via our website, meetings, and other methods as shown in the activities section above in 2016 and possibly 2017, pending the release of the final cleanup documents.

V. Technical Advisors Work Products (note: all of these products have been previously submitted to EPA)

1. [HARC Technical Review](#) of the February 2012 Preliminary Site Characterization Report Volume I and Volume II
2. [HARC Technical Review](#) of the May 2012 Exposure Assessment Memorandum
3. [HARC Technical Review](#) of the May 2012 Toxicological and Epidemiological Studies Memorandum
4. [HARC Technical Review](#) of the May 2012 Time Critical Removal Action Completion Report
5. [HARC Technical Review](#) of the October 2012 Public Health Assessment
6. [HARC Technical Review](#) of the December 2012 Remedial Alternatives Memorandum
7. [HARC Technical Review](#) of the May 2013 Baseline Ecological Assessment Report/Appendices
8. [HARC Technical Review](#) of the May 2013 Baseline Human Health Risk Assessment, Volume I and Volume II
9. [HARC Technical Review](#) of the May 2013 Remedial Investigation Report, Volume I and Volume II

VI. Funds Spent

- A. Federal Share - The total budget was \$62,500, with \$50,000 coming from the federal share. \$37,500 was expended on the technical advisor.
- B. Matching Share - GBF provided the 20% match (\$12,500) through in-kind donation of staff time for grant management; outreach to the local community including staff time for preparation of print and electronic media pieces and materials; provision of website resources; use of office equipment, office space, photocopying, printing, and postage, telephone; and meeting space.

VII. Conclusion

The project was successful in increasing the number of citizens who are aware of the EPA's action and the decisions that need to be made regarding the cleanup of the SJRWP. The EPA's public meeting attendance has been very good, in part due to our efforts. Our mailing list has grown over the grant period and will continue to grow as more members of the community hear about our efforts to educate the local population about the site and its cleanup. We anticipate that the number of public comments submitted on the proposed plan for cleanup will be very high, and further we feel that the comments will be well-informed.